

SOURCES AND METHODS

Unit of Analysis

The unit of analysis is the hospital stay rather than the patient. All discharges have been weighted to produce national estimates.

Coding Diagnoses and Procedures

The diagnoses and procedures associated with an inpatient hospitalization can be defined using several different medical condition classification systems. The following four systems are used within this report to identify specific diagnoses and procedures: International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM), Clinical Classifications Software (CCS), Diagnosis Related Groups (DRGs), and Major Diagnostic Categories (MDCs).

The most detailed system is the ICD-9-CM that contains over 12,000 detailed diagnoses and 3,500 detailed procedures. Each discharge record in the NIS is associated with one or more ICD-9-CM diagnosis code(s) and may contain one or more ICD-9-CM procedure code(s) if a procedure was performed during that hospitalization.

To make the number of ICD-9-CM diagnoses and procedures more manageable, AHRQ has designed the CCS tool that groups ICD-9-CM codes into 260 diagnostic and 231 procedure categories. This software aggregates similar diagnoses or procedures into clinically meaningful categories. More information on CCS can be found online (www.ahrq.gov/data/hcup; <http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp>). CCS codes are used extensively in this report to define groups of diagnoses and procedures for analysis. The CCS codes allow the reader to quickly and easily recognize patterns and trends in broad categories of hospital utilization.

In addition, diagnoses can also be grouped into DRGs. DRGs comprise a classification system that categorizes patients into groups that are clinically coherent and homogeneous with respect to resource use. DRGs group patients according to diagnosis, type of treatment (procedures), age, and other relevant criteria. Each hospital stay has one DRG assigned to it. The Centers for Medicare and Medicaid Services (CMS) uses this classification system as a basis for Medicare payments for inpatient hospital stays.

DRGs, in turn, can be summarized into MDCs, which are broad groups of DRGs such as Diseases and Disorders of the Nervous System or Diseases and Disorders of the Eye. Each hospital stay has one DRG and one MDC assigned to it.

Exhibit Diagnoses and Procedures

Throughout this report, combinations of diagnostic and procedure codes are used to isolate specific conditions or procedures. These codes are defined below by exhibit number.

SECTION 2—DIAGNOSES

EXHIBIT 2.1

Maternal CCS categories:

- 183 Hypertension complicating pregnancy, childbirth, and the puerperium (high blood pressure during pregnancy)
- 184 Early or threatened labor
- 185 Prolonged pregnancy
- 189 Previous C-section
- 190 Fetal distress and abnormal forces of labor
- 191 Polyhydramnios and other problems of amniotic cavity (excess amniotic fluid and other problems of amniotic cavity)
- 192 Umbilical cord complication
- 193 Trauma to external female genitals (vulva) and area between anus and vagina (perineum)
- 196 Normal pregnancy and/or delivery